

EXHIBIT C

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

VIRGINIA ELIZONDO

Plaintiff,

v.

SPRING BRANCH INDEPENT SCHOOL DISTRICT, CHRIS GONZALEZ,
PAM GOODSON, KAREN PECK, JOSEF D. KLAM, MINDA CAESAR,
CHRIS EARNEST, J. CARTER BREED, in their official capacity as members of the
Board of Trustees of Spring Branch ISD

Defendants

EXPERT REPORT OF JOHN R. ALFORD, Ph.D.

February 21, 2022

Scope of Inquiry

I have been retained by the law firm of Abernathy, Roeder, Boyd & Hullett, P.C. as an expert to provide analysis related to *Elizondo v. Spring Branch Independent School District, et al.* The specific scope of my assignment was to offer my expert opinions on the methodology and data employed by Dr. Robert M. Stein in his expert report(s) prepared on the Plaintiff's behalf in the this lawsuit. I have not yet been able to read and assess Dr. Stein's recent deposition in this case, and given the light it may shed on numerous areas not clearly documented in his report, I expect to supplement this report when that deposition transcript has been made available to me. My rate of compensation in this matter is \$400 per hour.

I. Qualifications

I am a tenured full professor of political science at Rice University. At Rice, I have taught courses on redistricting, elections, political representation, voting behavior and statistical methods at both the undergraduate and graduate level. Over the last thirty years, I have worked with numerous local governments on districting plans and on Voting Rights Act issues. I have previously provided expert reports and/or testified as an expert witness in voting rights and statistical issues in a variety of court cases, working for the U.S. Attorney in Houston, the Texas Attorney General, a U.S. Congressman and various cities and school districts.

In the 2000 round of redistricting, I was retained as an expert to provide advice to then Texas Attorney General John Cornyn in his role as Chair of the Legislative Redistricting Board. I subsequently served as the expert for the State of Texas in the state and federal litigation involving the 2001 redistricting for U.S. Congress, the Texas Senate, the Texas House of Representatives, and the Texas State Board of Education. I have continued to work for the Texas Attorney General in various election related lawsuits throughout the decades since, including challenges to various redistricting plans, and a challenge to the at large election of Texas Supreme Court and Court of Appeals justices. I have also worked as an expert on redistricting and voting rights cases in Louisiana, New Mexico, Mississippi, Wisconsin, Florida, Georgia, Michigan, New York, Arkansas, Pennsylvania and Alabama. The details of my academic background, including all publications in the last ten years, and work as an expert on all cases in which I have testified by deposition or at trial in the last four years, are covered in the attached CV (Appendix 1).

II. Data and Sources

In preparing my report, I have reviewed the filings in this case. I have also reviewed the report filed by the plaintiff's expert in this case, and various materials disclosure by Dr. Stein that he relied on in preparing his report. I have also reviewed various publications that Dr. Stein quoted or cited in his report.

III. Dr. Stein's Report

Dr. Stein's report focuses on three broad areas; evidence of racially polarized elections in Spring Branch ISD, the ability to create a citizen majority Hispanic single-member district in Spring Branch ISD, and a review of various published literature on the impact and desirability of single-member versus at large elections for school districts. I was not asked to evaluate the demographic and Geographic Information System (GIS) work that Dr. Stein performed and reported on, and so will not address that section of his report here.

Racially (Ethnically) Polarized Voting in Spring Branch ISD

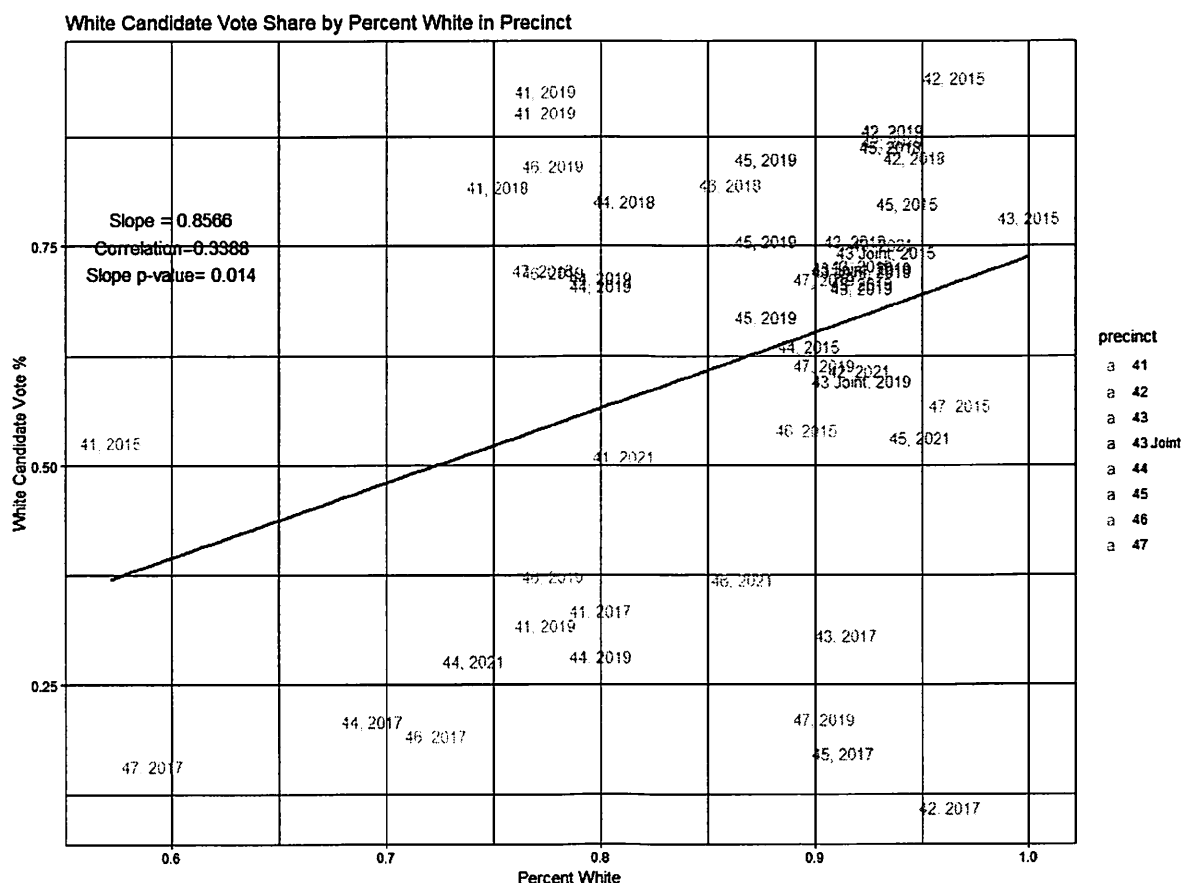
The analysis of racial and ethnic polarization that Dr. Stein provides in his report takes a broad collective view of this issue, rather than the more traditional VRA litigation approach of analyzing each election contest separately, and then considering the general pattern across those election contests. Typically, an analysis of the school board elections for the purpose of assessing the *Gingles* 2 and 3 threshold tests would proceed by selecting recent (last 5-10 years) contested elections and collecting votes cast for the candidates in each contest by polling place in a specific year, along with estimates of the ethnicity of the voters in each polling place using either Census Bureau Citizen Voting Age Population (CVAP) data, or an estimate of the number of Hispanic voters at each polling place in each contest based on an application of the Census Spanish Surname list to the recorded list of voters that actually participated in the election contest. In each election contest estimates of the degree of Hispanic cohesion (*Gingles* 2) and Anglo bloc voting (*Gingles* 3) would then be produced by applying some recent variant of King's Ecological Inference (EI) to estimate both of these two separate parameters, and also to estimate a confidence interval for each of these parameters.

The EI estimate of the share of Hispanic voters favoring a particular candidate provides the evidence to answer the *Gingles* 2 question as to whether Hispanic voters are cohesive in support

of a preferred candidate, and whether the confidence intervals associated with that estimated level of support allow us to reject the null hypotheses of zero cohesion among Hispanic voters (e.g. splitting 50/50 in a two person contest). Assuming that in a given contest there is statistically significant evidence of a cohesively supported preferred candidate (regardless of whether that candidate is Hispanic or Anglo), the analysis would then shift to the degree to which there is statistically significant evidence that Anglo voters were cohesive in voting in opposition to that Hispanic preferred candidate. With these separate estimates for each of the contested election contests in the chosen time period we could turn to the final summary question of the *Gingles* inquiry: looking across the analyzed election contests, was the cohesively supported preferred candidate of Hispanic voters by those voters usually defeated by Anglo bloc voting in opposition to that preferred candidate.

In contrast to this usual approach, Dr. Stein's analysis proceeds by selecting only contests with at least one candidate with a Hispanic surname, and then assuming that that candidate is actually Hispanic and is also the preferred candidate of Hispanic voters. In addition, Dr. Stein's methodology is atypical for VRA cases in that he utilizes Imai and Khana's Bayesian Improved Surname Geocoding (BISG) to estimate the proportion of minority voters in each polling place in each election, rather than the common established technique of using either CVAP or Spanish Surname coding based directly on the Census Spanish Surname list. Since the issue in this case involves the degree of cohesive preferences among Hispanic voters and the degree of cohesive opposition to those Hispanic preferred candidates among non-Hispanic voters, there is nothing to be gained by using BISG to create separate estimates of White, Black, and Asian voters, as all three are by definition non-Hispanic voters.

While non-standard, the results provided by Dr. Stein in his report are suggestive in regard to the degree to which voters vote choices might be linked to their support for Hispanic surnamed candidates. For ease of reference, Figure 2 (page 6) from Dr. Stein's report is reproduced below.



Looking at the region from the middle to the right side of the graph that represents polling places where Dr. Stein estimates that 75% or more of the voters are non-Hispanic Whites, it is clear that rather than clustering tightly along the prediction line in the graph, as we would expect if ethnicity of the candidates and voters was the driving force in vote choice in these elections, the results are scattered all over the range of possible vote shares. Even if we focus on specific polling places we see very different results, for example in polling place 42 we see over 80% support for the non-Hispanic White candidate in 2015, and in the next election in 2017, less than 20% support for the non-Hispanic White candidate.

This highly scattered pattern suggests that the voters are responding to some set of influences well beyond the ethnicity of the candidates. The lack of a strong association is also clear in the reported summary measure of association. The correlation coefficient of .3388 is not itself on an intuitive scale, but it can be squared to obtain the R-squared for the relationship, a linear measure of the proportion of the variation in the vote cast for the candidate that is accounted for by

variation in the proportion of non-Hispanic voters across the polling places. In this case the R^2 for Dr. Stein's Figure 2 is .1148, indicating that less than 12 percent of the variation in voting patterns for White candidates is accounted for by variation in the proportion of non-Hispanic White voters across the polling places. Put another way, over 87 percent of the variation in non-Hispanic White voting behavior is explained by factors other than voter and candidate ethnicity. Among a range of other concerns, this unexplained variance could reflect geographic divides within the Spring Branch ISD (e.g. north of I-10 versus south of I-10), nascent partisan divides that have come to be an increasingly common feature of local elections despite their officially non-partisan character, and non-racial differences in candidate positions and campaigns.

Taken together, the issues identified above suggest that the evidence relating to *Gingles* 2 and *Gingles* 3 provided in Dr. Stein's report are not sufficient to meet the plaintiff's burden of proof on these two threshold conditions, or on the broader totality of the circumstances. This is not to say that the analysis provided by Dr. Stein is not compatible with the existence within Spring Branch ISD of legally significant racially polarized voting. Instead, the generalized summary form of the analysis does not provide the election by election details that would allow a conclusion as to whether elections in Spring Branch ISD demonstrate the presence of legally significant racially polarized voting, rather than its mere possibility, in the way that a more traditional analysis could.

Existing Research on Minority representation in At-large and Single-member Systems

Dr. Stein cites an extensive body of academic literature on the effectiveness of switching from at large to single-member district elections. While much of the literature reports a positive relationship between single-member district election systems and minority representation, most of that historical literature was based primarily on studies of Black representation. The findings are not as clear or unqualified when the focal minority group shifts from Blacks to Hispanics. In fact, as Dr. Stein correctly notes certain conditions must be met in order to achieve positive representational outcomes for Hispanic voters, and "when these conditions are not met, however, moving from an at-large to single-member system of representation was found to have a null or even negative effect on minority representation" (page 11-12).

This question with regard to Hispanic voters arises early in the literature Dr. Stein cites. The 1990 Welch article summarizes a series of studies reaching back to the 70s in which impact of election structures was much less clear for Hispanic voters compared to Black voters. As she notes on page 1053 of that article:¹

The findings concerning election structures and Hispanic representation are, however, less clear cut. Davidson and Korbel (1981) found that Hispanics as well as blacks fare better in district elections though the analysis they present combined data for Hispanics and blacks. MacManus (1978) showed that, among the major types of electoral systems, Hispanic representation is slightly more equitable in district than pure at-large elections, but most equitable in mixed systems, although these differences were small. Taebel (1978) reported that council size was more important than electoral structure for Hispanics, though for each size of council, Hispanics were better represented in district rather than at-large elections; he, like MacManus, found that Hispanics were best represented in mixed systems. Welch and Karnig (1978) found that structure makes hardly any difference for Hispanic representation, a finding echoed a decade later by Guerra's (1989) study of Los Angeles county.

Welch goes on to conclude, on the basis of the more up-to-date analysis presented in that article, that her current analysis confirms the earlier reports. She states, referring to the broad findings supporting the superiority of single-member district systems over at-large systems for Black representation that “These generalizations about the linkage between electoral structures and the representation of blacks do not apply to Hispanics. Overall, district elections do not promote more equitable representation for Hispanics” (page 1072).

These concerns about the nature of the connection between electoral structures and Hispanic representation in Welch’s 1990 article are reinforced by the conclusions reached thirty years later. In one of the most recent and comprehensive studies that Dr. Stein cites, Abott and Magazinnik summarize their findings on this issue on page 726.²

In large and segregated districts with sufficiently small Latino populations, the reform actually had a negative effect on Latino officeholding. As the third panels of Figures 4 and 5 show, at Latino VEP of 0.20, conversions in both high-dissimilarity and high-enrollment districts decreased the proportion of seats won by Latinos by 20 percentage points ($p < .05$). The negative effects are not surprising: Not only do these districts lack a large enough Latino minority to constitute an influential voting bloc, but also, as critics

¹ Welch, S. 1990. The Impact of At-Large Elections on the Representation of Blacks and Hispanics. *The Journal of Politics*, 52(4), 1050–1076. <https://doi.org/10.2307/2131682>

²Abbot, Carolyn and Asya Magazinnik. 2021. “At-Large Elections and Minority Representation in Local Government,” *American Journal of Political Science*. 64:717-773.

of the reform have argued, introducing an ethnic gerrymander may amplify voters' perceptions that political conflict falls along this particular dimension. The result—increasingly racially polarized voting, coupled with small numbers of Latino voters relative to other groups—may create new barriers to Latino electoral victories. As the histograms at the top of Figures 4 and 5 show, not many of the treated observations were both low on Latino VEP and high on segregation and/or enrollment, and therefore not many districts experienced negative treatment effects in practice; that said, reformers ought to carefully consider moving forward with conversion efforts under this set of adverse conditions.

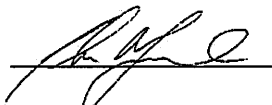
The conditions they cite are closely matched in the Spring Branch ISD. As Dr. Stein notes in his report “Researchers (Abbott and Magazinnik 2020; Massey and Denton 1993; Ananat 2011; Collins and Margo 2000; Cutler and Glaeser 1997; Cutler, Glaeser and Vigdor 1999) identify dissimilarity index scores below .3 as indicating low levels of segregation, .3 to .6 as moderate levels of segregation and .6 and above as high levels of segregation. The Spring Branch ISD’s dissimilarity index score at the school level is .694 and .596 at the enrollment zone level” (page 9). This puts Spring Branch ISD in Abbott and Magazinnik’s highest category of dissimilarity in enrollment.

Similarly, the low level of Voter Eligible Population (VEP) in Spring Branch ISD also puts Spring Branch ISD in the category where Abbott and Magazinnik observe potential negative effects of a move to a single-member district election system. Spanish Surname Registered Voters (SSRV) make up less than 20% of the registered voters in Spring Branch ISD, and in the most recent 2021 school board elections that included the Position 4 Elizondo – Earnest contest, Spanish Surname Registered Voters made up less than six percent of the actual election day Spring Branch ISD voters.

This combination of low Hispanic proportions in terms of eligible voters and relatively high dissimilarity makes Spring Branch ISD the sort of district that the Abbott and Magazinnik article warns typically experiences negative effects on Hispanic representation, rather than the more common intended positive effects. The warning offered by Abbott and Magazinnik about the unintended negative consequences of a move to all at-large system must be considered carefully here as part of the totality of the circumstances. The demographic conditions they describe are a close match for the situation in Spring Branch ISD, and the early signs of the negative effects they warn about can already be seen in terms of the current rapidly spiraling and intensely

divisive political treatment of the single-member district issue in Spring Branch ISD (for example the 'Don't HISD our SBISD' signs at the recent school board meetings).

February 21, 2022

A handwritten signature in black ink, appearing to read "John R. Alford", is written over a horizontal line.

John R. Alford, Ph.D.

Appendix 1

Curriculum Vitae – John Alford, Ph.D.

John R. Alford

Curriculum Vitae

February, 2022

Dept. of Political Science
Rice University - MS-24
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Employment:

Full Professor, Rice University, 2015 to present.
Associate Professor, Rice University, 1985-2015.
Assistant Professor, University of Georgia, 1981-1985.
Instructor, Oakland University, 1980-1981.
Teaching-Research Fellow, University of Iowa, 1977-1980.
Research Associate, Institute for Urban Studies, Houston, Texas, 1976-1977.

Education:

Ph.D., University of Iowa, Political Science, 1981.
M.A., University of Iowa, Political Science, 1980.
M.P.A., University of Houston, Public Administration, 1977.
B.S., University of Houston, Political Science, 1975.

Books:

Predisposed: Liberals, Conservatives, and the Biology of Political Differences. New York: Routledge, 2013. Co-authors, John R. Hibbing and Kevin B. Smith.

Articles:

"Political Orientations Vary with Detection of Androstenone," with Amanda Friesen, Michael Gruszczynski, and Kevin B. Smith. **Politics and the Life Sciences**. (Spring, 2020).

"Intuitive ethics and political orientations: Testing moral foundations as a theory of political ideology." with Kevin Smith, John Hibbing, Nicholas Martin, and Peter Hatemi. **American Journal of Political Science**. (April, 2017).

"The Genetic and Environmental Foundations of Political, Psychological, Social, and Economic Behaviors: A Panel Study of Twins and Families." with Peter Hatemi, Kevin Smith, and John Hibbing. **Twin Research and Human Genetics**. (May, 2015.)

"Liberals and conservatives: Non-convertible currencies." with John R. Hibbing and Kevin B. Smith. **Behavioral and Brain Sciences** (January, 2015).

"Non-Political Images Evoke Neural Predictors Of Political Ideology." with Woo-Young Ahn, Kenneth T. Kishida, Xiaosi Gu, Terry Lohrenz, Ann Harvey, Kevin Smith, Gideon Yaffe, John Hibbing, Peter Dayan, P. Read Montague. **Current Biology**. (November, 2014).

“Cortisol and Politics: Variance in Voting Behavior is Predicted by Baseline Cortisol Levels.” with Jeffrey French, Kevin Smith, Adam Guck, Andrew Birnie, and John Hibbing. **Physiology & Behavior**. (June, 2014).

“Differences in Negativity Bias Underlie Variations in Political Ideology.” with Kevin B. Smith and John R. Hibbing. **Behavioral and Brain Sciences**. (June, 2014).

“Negativity bias and political preferences: A response to commentators Response.” with Kevin B. Smith and John R. Hibbing. **Behavioral and Brain Sciences**. (June, 2014).

“Genetic and Environmental Transmission of Political Orientations.” with Carolyn L. Funk, Matthew Hibbing, Kevin B. Smith, Nicholas R. Eaton, Robert F. Krueger, Lindon J. Eaves, John R. Hibbing. **Political Psychology**, (December, 2013).

“Biology, Ideology, and Epistemology: How Do We Know Political Attitudes Are Inherited and Why Should We Care?” with Kevin Smith, Peter K. Hatemi, Lindon J. Eaves, Carolyn Funk, and John R. Hibbing. **American Journal of Political Science**. (January, 2012)

“Disgust Sensitivity and the Neurophysiology of Left-Right Political Orientations.” with Kevin Smith, John Hibbing, Douglas Oxley, and Matthew Hibbing, **PlosONE**, (October, 2011).

“Linking Genetics and Political Attitudes: Re-Conceptualizing Political Ideology.” with Kevin Smith, John Hibbing, Douglas Oxley, and Matthew Hibbing, **Political Psychology**, (June, 2011).

“The Politics of Mate Choice.” with Peter Hatemi, John R. Hibbing, Nicholas Martin and Lindon Eaves, **Journal of Politics**, (March, 2011).

“Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs” with Peter Hatemi, John Hibbing, Sarah Medland, Matthew Keller, Kevin Smith, Nicholas Martin, and Lindon Eaves, **American Journal of Political Science**, (July, 2010).

“The Ultimate Source of Political Opinions: Genes and the Environment” with John R. Hibbing in **Understanding Public Opinion**, 3rd Edition eds. Barbara Norrander and Clyde Wilcox, Washington D.C.: CQ Press, (2010).

“Is There a ‘Party’ in your Genes” with Peter Hatemi, John R. Hibbing, Nicholas Martin and Lindon Eaves, **Political Research Quarterly**, (September, 2009).

“Twin Studies, Molecular Genetics, Politics, and Tolerance: A Response to Beckwith and Morris” with John R. Hibbing and Cary Funk, **Perspectives on Politics**, (December, 2008). This is a solicited response to a critique of our 2005 APSR article “Are Political Orientations Genetically Transmitted?”

“Political Attitudes Vary with Physiological Traits” with Douglas R. Oxley, Kevin B. Smith, Matthew V. Hibbing, Jennifer L. Miller, Mario Scalora, Peter K. Hatemi, and John R. Hibbing, **Science**, (September 19, 2008).

“The New Empirical Biopolitics” with John R. Hibbing, **Annual Review of Political Science**, (June, 2008).

“Beyond Liberals and Conservatives to Political Genotypes and Phenotypes” with John R. Hibbing and Cary Funk, **Perspectives on Politics**, (June, 2008). This is a solicited response to a critique of our 2005 APSR article “Are Political Orientations Genetically Transmitted?”

"Personal, Interpersonal, and Political Temperaments" with John R. Hibbing, **Annals of the American Academy of Political and Social Science**, (November, 2007).

"Is Politics in our Genes?" with John R. Hibbing, **Tidsskriftet Politik**, (February, 2007).

"Biology and Rational Choice" with John R. Hibbing, **The Political Economist**, (Fall, 2005)

"Are Political Orientations Genetically Transmitted?" with John R. Hibbing and Carolyn Funk, **American Political Science Review**, (May, 2005). (The main findings table from this article has been reprinted in two college level text books - Psychology, 9th ed. and Invitation to Psychology 4th ed. both by Wade and Tavis, Prentice Hall, 2007).

"The Origin of Politics: An Evolutionary Theory of Political Behavior" with John R. Hibbing, **Perspectives on Politics**, (December, 2004).

"Accepting Authoritative Decisions: Humans as Wary Cooperators" with John R. Hibbing, **American Journal of Political Science**, (January, 2004).

"Electoral Convergence of the Two Houses of Congress" with John R. Hibbing, in **The Exceptional Senate**, ed. Bruce Oppenheimer, Columbus: Ohio State University Press, (2002).

"We're All in this Together: The Decline of Trust in Government, 1958-1996." in **What is it About Government that Americans Dislike?**, eds. John Hibbing and Beth Theiss-Morse, Cambridge: Cambridge University Press, (2001).

"The 2000 Census and the New Redistricting," **Texas State Bar Association School Law Section Newsletter**, (July, 2000).

"Overdraft: The Political Cost of Congressional Malfeasance" with Holly Teeters, Dan Ward, and Rick Wilson, **Journal of Politics** (August, 1994).

"Personal and Partisan Advantage in U.S. Congressional Elections, 1846-1990" with David W. Brady, in **Congress Reconsidered** 5th edition, eds. Larry Dodd and Bruce Oppenheimer, CQ Press, (1993).

"The 1990 Congressional Election Results and the Fallacy that They Embodied an Anti-Incumbent Mood" with John R. Hibbing, **PS** 25 (June, 1992).

"Constituency Population and Representation in the United States Senate" with John R. Hibbing. **Legislative Studies Quarterly**, (November, 1990).

"Editors' Introduction: Electing the U.S. Senate" with Bruce I. Oppenheimer. **Legislative Studies Quarterly**, (November, 1990).

"Personal and Partisan Advantage in U.S. Congressional Elections, 1846-1990" with David W. Brady, in **Congress Reconsidered** 4th edition, eds. Larry Dodd and Bruce Oppenheimer, CQ Press, (1988). Reprinted in *The Congress of the United States, 1789-1989*, ed. Joel Silby, Carlson Publishing Inc., (1991), and in *The Quest for Office*, eds. Wayne and Wilcox, St. Martins Press, (1991).

"Can Government Regulate Fertility? An Assessment of Pro-natalist Policy in Eastern Europe" with Jerome Legge. **The Western Political Quarterly** (December, 1986).

"Partisanship and Voting" with James Campbell, Mary Munro, and Bruce Campbell, in **Research in Micropolitics. Volume 1 - Voting Behavior**. Samuel Long, ed. JAI Press, (1986).

"Economic Conditions and Individual Vote in the Federal Republic of Germany" with Jerome S. Legge. **Journal of Politics** (November, 1984).

"Television Markets and Congressional Elections" with James Campbell and Keith Henry. **Legislative Studies Quarterly** (November, 1984).

"Economic Conditions and the Forgotten Side of Congress: A Foray into U.S. Senate Elections" with John R. Hibbing, **British Journal of Political Science** (October, 1982).

"Increased Incumbency Advantage in the House" with John R. Hibbing, **Journal of Politics** (November, 1981). Reprinted in *The Congress of the United States, 1789-1989*, Carlson Publishing Inc., (1991).

"The Electoral Impact of Economic Conditions: Who is Held Responsible?" with John R. Hibbing, **American Journal of Political Science** (August, 1981).

"Comment on Increased Incumbency Advantage" with John R. Hibbing, Refereed communication: **American Political Science Review** (March, 1981).

"Can Government Regulate Safety? The Coal Mine Example" with Michael Lewis-Beck, **American Political Science Review** (September, 1980).

Awards and Honors:

CQ Press Award - 1988, honoring the outstanding paper in legislative politics presented at the 1987 Annual Meeting of the American Political Science Association. Awarded for "The Demise of the Upper House and the Rise of the Senate: Electoral Responsiveness in the United States Senate" with John Hibbing.

Research Grants:

National Science Foundation, 2009-2011, "Identifying the Biological Influences on Political Temperaments", with John Hibbing, Kevin Smith, Kim Espy, Nicolas Martin and Read Montague. This is a collaborative project involving Rice, University of Nebraska, Baylor College of Medicine, and Queensland Institute for Medical Research.

National Science Foundation, 2007-2010, "Genes and Politics: Providing the Necessary Data", with John Hibbing, Kevin Smith, and Lindon Eaves. This is a collaborative project involving Rice, University of Nebraska, Virginia Commonwealth University, and the University of Minnesota.

National Science Foundation, 2007-2010, "Investigating the Genetic Basis of Economic Behavior", with John Hibbing and Kevin Smith. This is a collaborative project involving Rice, University of Nebraska, Virginia Commonwealth University, and the Queensland Institute of Medical Research.

Rice University Faculty Initiatives Fund, 2007-2009, "The Biological Substrates of Political Behavior". This is in assistance of a collaborative project involving Rice, Baylor College of Medicine, Queensland Institute of Medical Research, University of Nebraska, Virginia Commonwealth University, and the University of Minnesota.

National Science Foundation, 2004-2006, "Decision-Making on Behalf of Others", with John Hibbing. This is a collaborative project involving Rice and the University of Nebraska.

National Science Foundation, 2001-2002, dissertation grant for Kevin Arceneaux, "Doctoral Dissertation Research in Political Science: Voting Behavior in the Context of U.S. Federalism."

National Science Foundation, 2000-2001, dissertation grant for Stacy Ulbig, "Doctoral Dissertation Research in Political Science: Sub-national Contextual Influences on Political Trust."

National Science Foundation, 1999-2000, dissertation grant for Richard Engstrom, "Doctoral Dissertation Research in Political Science: Electoral District Structure and Political Behavior."

Rice University Research Grant, 1985, Recent Trends in British Parliamentary Elections.

Faculty Research Grants Program, University of Georgia, Summer, 1982. Impact of Media Structure on Congressional Elections, with James Campbell.

Papers Presented:

"The Physiological Basis of Political Temperaments" 6th European Consortium for Political Research General Conference, Reykjavik, Iceland (2011), with Kevin Smith, and John Hibbing.

"Identifying the Biological Influences on Political Temperaments" National Science Foundation Annual Human Social Dynamics Meeting (2010), with John Hibbing, Kimberly Espy, Nicholas Martin, Read Montague, and Kevin B. Smith.

"Political Orientations May Be Related to Detection of the Odor of Androstenone" Annual meeting of the Midwest Political Science Association, Chicago, IL (2010), with Kevin Smith, Amanda Balzer, Michael Gruszczynski, Carly M. Jacobs, and John Hibbing.

"Toward a Modern View of Political Man: Genetic and Environmental Transmission of Political Orientations from Attitude Intensity to Political Participation" Annual meeting of the American Political Science Association, Washington, DC (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Genetic and Environmental Transmission of Political Involvement from Attitude Intensity to Political Participation" Annual meeting of the International Society for Political Psychology, San Francisco, CA (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Are Violations of the EEA Relevant to Political Attitudes and Behaviors?" Annual meeting of the Midwest Political Science Association, Chicago, IL (2010), with Kevin Smith, and John Hibbing.

"The Neural Basis of Representation" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with John Hibbing.

"Genetic and Environmental Transmission of Value Orientations" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with Carolyn Funk, Kevin Smith, Matthew Hibbing, Pete Hatemi, Robert Krueger, Lindon Eaves, and John Hibbing.

"The Genetic Heritability of Political Orientations: A New Twin Study of Political Attitudes" Annual Meeting of the International Society for Political Psychology, Dublin, Ireland (2009), with John Hibbing, Cary Funk, Kevin Smith, and Peter K Hatemi.

"The Heritability of Value Orientations" Annual meeting of the Behavior Genetics Association, Minneapolis, MN (2009), with Kevin Smith, John Hibbing, Carolyn Funk, Robert Krueger, Peter Hatemi, and Lindon Eaves.

"The Ick Factor: Disgust Sensitivity as a Predictor of Political Attitudes" Annual meeting of the Midwest Political Science Association, Chicago, IL (2009), with Kevin Smith, Douglas Oxley Matthew Hibbing, and John Hibbing.

"The Ideological Animal: The Origins and Implications of Ideology" Annual meeting of the American Political Science Association, Boston, MA (2008), with Kevin Smith, Matthew Hibbing, Douglas Oxley, and John Hibbing.

"The Physiological Differences of Liberals and Conservatives" Annual meeting of the Midwest Political Science Association, Chicago, IL (2008), with Kevin Smith, Douglas Oxley, and John Hibbing.

"Looking for Political Genes: The Influence of Serotonin on Political and Social Values" Annual meeting of the Midwest Political Science Association, Chicago, IL (2008), with Peter Hatemi, Sarah Medland, John Hibbing, and Nicholas Martin.

"Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs" Annual meeting of the American Political Science Association, Chicago, IL (2007), with Peter Hatemi, John Hibbing, Matthew Keller, Nicholas Martin, Sarah Medland, and Lindon Eaves.

"Factorial Association: A generalization of the Fulker between-within model to the multivariate case" Annual meeting of the Behavior Genetics Association, Amsterdam, The Netherlands (2007), with Sarah Medland, Peter Hatemi, John Hibbing, William Coventry, Nicholas Martin, and Michael Neale.

"Not by Twins Alone: Using the Extended Twin Family Design to Investigate the Genetic Basis of Political Beliefs" Annual meeting of the Midwest Political Science Association, Chicago, IL (2007), with Peter Hatemi, John Hibbing, Nicholas Martin, and Lindon Eaves.

"Getting from Genes to Politics: The Connecting Role of Emotion-Reading Capability" Annual Meeting of the International Society for Political Psychology, Portland, OR, (2007.), with John Hibbing.

"The Neurological Basis of Representative Democracy." Hendricks Conference on Political Behavior, Lincoln, NE (2006), with John Hibbing.

"The Neural Basis of Representative Democracy" Annual meeting of the American Political Science Association, Philadelphia, PA (2006), with John Hibbing.

"How are Political Orientations Genetically Transmitted? A Research Agenda" Annual meeting of the Midwest Political Science Association, Chicago Illinois (2006), with John Hibbing.

"The Politics of Mate Choice" Annual meeting of the Southern Political Science Association, Atlanta, GA (2006), with John Hibbing.

"The Challenge Evolutionary Biology Poses for Rational Choice" Annual meeting of the American Political Science Association, Washington, DC (2005), with John Hibbing and Kevin Smith.

"Decision Making on Behalf of Others" Annual meeting of the American Political Science Association, Washington, DC (2005), with John Hibbing.

"The Source of Political Attitudes and Behavior: Assessing Genetic and Environmental Contributions" Annual meeting of the Midwest Political Science Association, Chicago Illinois (2005), with John Hibbing and Carolyn Funk.

"The Source of Political Attitudes and Behavior: Assessing Genetic and Environmental Contributions" Annual meeting of the American Political Science Association, Chicago Illinois (2004), with John Hibbing and Carolyn Funk.

"Accepting Authoritative Decisions: Humans as Wary Cooperators" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (2002), with John Hibbing

"Can We Trust the NES Trust Measure?" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (2001), with Stacy Ulbig.

"The Impact of Organizational Structure on the Production of Social Capital Among Group Members" Annual Meeting of the Southern Political Science Association, Atlanta, Georgia (2000), with Allison Rinden.

"Isolating the Origins of Incumbency Advantage: An Analysis of House Primaries, 1956-1998" Annual Meeting of the Southern Political Science Association, Atlanta, Georgia (2000), with Kevin Arceneaux.

"The Electorally Indistinct Senate," Norman Thomas Conference on Senate Exceptionalism, Vanderbilt University; Nashville, Tennessee; October (1999), with John R. Hibbing.

"Interest Group Participation and Social Capital" Annual Meeting of the Midwest Political Science Association, Chicago, Illinois (1999), with Allison Rinden.

"We're All in this Together: The Decline of Trust in Government, 1958-1996." The Hendricks Symposium, University of Nebraska, Lincoln. (1998)

"Constituency Population and Representation in the United States Senate," Electing the Senate; Houston, Texas; December (1989), with John R. Hibbing.

"The Disparate Electoral Security of House and Senate Incumbents," American Political Science Association Annual Meetings; Atlanta, Georgia; September (1989), with John R. Hibbing.

"Partisan and Incumbent Advantage in House Elections," Annual Meeting of the Southern Political Science Association (1987), with David W. Brady.

"Personal and Party Advantage in U.S. House Elections, 1846-1986" with David W. Brady, 1987 Social Science History Association Meetings.

"The Demise of the Upper House and the Rise of the Senate: Electoral Responsiveness in the United States Senate" with John Hibbing, 1987 Annual Meeting of the American Political Science Association.

"A Comparative Analysis of Economic Voting" with Jerome Legge, 1985 Annual Meeting of the American Political Science Association.

"An Analysis of Economic Conditions and the Individual Vote in Great Britain, 1964-1979" with Jerome Legge, 1985 Annual Meeting of the Western Political Science Association.

"Can Government Regulate Fertility? An Assessment of Pro-natalist Policy in Eastern Europe" with Jerome Legge, 1985 Annual Meeting of the Southwestern Social Science Association.

"Economic Conditions and the Individual Vote in the Federal Republic of Germany" with Jerome S. Legge, 1984 Annual Meeting of the Southern Political Science Association.

"The Conditions Required for Economic Issue Voting" with John R. Hibbing, 1984 Annual Meeting of the Midwest Political Science Association.

"Incumbency Advantage in Senate Elections," 1983 Annual Meeting of the Midwest Political Science Association.

"Television Markets and Congressional Elections: The Impact of Market/District Congruence" with James Campbell and Keith Henry, 1982 Annual Meeting of the Southern Political Science Association.

"Economic Conditions and Senate Elections" with John R. Hibbing, 1982 Annual Meeting of the Midwest Political Science Association. "Pocketbook Voting: Economic Conditions and Individual Level Voting," 1982 Annual Meeting of the American Political Science Association.

"Increased Incumbency Advantage in the House," with John R. Hibbing, 1981 Annual Meeting of the Midwest Political Science Association.

Other Conference Participation:

Roundtable Participant – Closing Round-table on Biopolitics; 2016 UC Merced Conference on Bio-Politics and Political Psychology, Merced, CA.

Roundtable Participant "Genes, Brains, and Core Political Orientations" 2008 Annual Meeting of the Southwestern Political Science Association, Las Vegas.

Roundtable Participant "Politics in the Laboratory" 2007 Annual Meeting of the Southern Political Science Association, New Orleans.

Short Course Lecturer, "What Neuroscience has to Offer Political Science" 2006 Annual Meeting of the American Political Science Association.

Panel chair and discussant, "Neuro-scientific Advances in the Study of Political Science" 2006 Annual Meeting of the American Political Science Association.

Presentation, "The Twin Study Approach to Assessing Genetic Influences on Political Behavior" Rice Conference on New Methods for Understanding Political Behavior, 2005.

Panel discussant, "The Political Consequences of Redistricting," 2002 Annual Meeting of the American Political Science Association.

Panel discussant, "Race and Redistricting," 1999 Annual Meeting of the Midwest Political Science Association.

Invited participant, "Roundtable on Public Dissatisfaction with American Political Institutions", 1998 Annual Meeting of the Southwestern Social Science Association.

Presentation, "Redistricting in the '90s," Texas Economic and Demographic Association, 1997.

Panel chair, "Congressional Elections," 1992 Annual Meeting of the Southern Political Science Association.

Panel discussant, "Incumbency and Congressional Elections," 1992 Annual Meeting of the American Political Science Association.

Panel chair, "Issues in Legislative Elections," 1991 Annual Meeting of the Midwest Political Science Association.

Panel chair, "Economic Attitudes and Public Policy in Europe," 1990 Annual Meeting of the Southern Political Science Association

Panel discussant, "Retrospective Voting in U.S. Elections," 1990 Annual Meeting of the Midwest Political Science Association.

Co-convenor, with Bruce Oppenheimer, of Electing the Senate, a national conference on the NES 1988 Senate Election Study. Funded by the Rice Institute for Policy Analysis, the University of Houston Center for Public Policy, and the National Science Foundation, Houston, Texas, December, 1989.

Invited participant, Understanding Congress: A Bicentennial Research Conference, Washington, D.C., February, 1989.

Invited participant--Hendricks Symposium on the United States Senate, University of Nebraska, Lincoln, Nebraska, October, 1988

Invited participant--Conference on the History of Congress, Stanford University, Stanford, California, June, 1988.

Invited participant, "Roundtable on Partisan Realignment in the 1980's", 1987 Annual Meeting of the Southern Political Science Association.

Professional Activities:

Other Universities:

Invited Speaker, Annual Lecture, Psi Kappa -the Psychology Club at Houston Community College, 2018.

Invited Speaker, Annual Allman Family Lecture, Dedman College Interdisciplinary Institute, Southern Methodist University, 2016.

Invited Speaker, Annual Lecture, Psi Sigma Alpha – Political Science Dept., Oklahoma State University, 2015.

Invited Lecturer, Department of Political Science, Vanderbilt University, 2014.

Invited Speaker, Annual Lecture, Psi Kappa -the Psychology Club at Houston Community College, 2014.

Invited Speaker, Graduate Student Colloquium, Department of Political Science, University of New Mexico, 2013.

Invited Keynote Speaker, Political Science Alumni Evening, University of Houston, 2013.

Invited Lecturer, Biology and Politics Masters Seminar (John Geer and David Bader), Department of Political Science and Biology Department, Vanderbilt University, 2010.

Invited Lecturer, Biology and Politics Senior Seminar (John Geer and David Bader), Department of Political Science and Biology Department, Vanderbilt University, 2008.

Visiting Fellow, the Hoover Institution, Stanford University, 2007.

Invited Speaker, Joint Political Psychology Graduate Seminar, University of Minnesota, 2007.

Invited Speaker, Department of Political Science, Vanderbilt University, 2006.

Member:

Editorial Board, Journal of Politics, 2007-2008.

Planning Committee for the National Election Studies' Senate Election Study, 1990-92.

Nominations Committee, Social Science History Association, 1988

Reviewer for:

American Journal of Political Science
American Political Science Review
American Politics Research
American Politics Quarterly
American Psychologist
American Sociological Review
Canadian Journal of Political Science
Comparative Politics
Electoral Studies
Evolution and Human Behavior
International Studies Quarterly

Journal of Politics
 Journal of Urban Affairs
 Legislative Studies Quarterly
 National Science Foundation
 PLoS ONE
 Policy Studies Review
 Political Behavior
 Political Communication
 Political Psychology
 Political Research Quarterly
 Public Opinion Quarterly
 Science
 Security Studies
 Social Forces
 Social Science Quarterly
 Western Political Quarterly

University Service:

Member, University Senate, 2021-2023.

Member, University Parking Committee, 2016-2022.

Member, University Benefits Committee, 2013-2016.

Internship Director for the Department of Political Science, 2004-2018.

Member, University Council, 2012-2013.

Invited Speaker, Rice Classroom Connect, 2016.

Invited Speaker, Glasscock School, 2016.

Invited Speaker, Rice Alumni Association, Austin, 2016.

Invited Speaker, Rice Alumni Association, New York City, 2016.

Invited Speaker, Rice TEDxRiceU , 2013.

Invited Speaker, Rice Alumni Association, Atlanta, 2011.

Lecturer, Advanced Topics in AP Psychology, Rice University AP Summer Institute, 2009.

Scientia Lecture Series: "Politics in Our Genes: The Biology of Ideology" 2008

Invited Speaker, Rice Alumni Association, Seattle, San Francisco and Los Angeles, 2008.

Invited Speaker, Rice Alumni Association, Austin, Chicago and Washington, DC, 2006.

Invited Speaker, Rice Alumni Association, Dallas and New York, 2005.

Director: Rice University Behavioral Research Lab and Social Science Computing Lab, 2005-2006.

University Official Representative to the Inter-university Consortium for Political and Social Research, 1989-2012.

Director: Rice University Social Science Computing Lab, 1989-2004.

Member, Rice University Information Technology Access and Security Committee, 2001-2002

Rice University Committee on Computers, Member, 1988-1992, 1995-1996; Chair, 1996-1998, Co-chair, 1999.

Acting Chairman, Rice Institute for Policy Analysis, 1991-1992.

Divisional Member of the John W. Gardner Dissertation Award Selection Committee, 1998

Social Science Representative to the Educational Sub-committee of the Computer Planning Committee, 1989-1990.

Director of Graduate Admissions, Department of Political Science, Rice University, 1986-1988.

Co-director, Mellon Workshop: Southern Politics, May, 1988.

Guest Lecturer, Mellon Workshop: The U.S. Congress in Historical Perspective, May, 1987 and 1988.

Faculty Associate, Hanszen College, Rice University, 1987-1990.

Director, Political Data Analysis Center, University of Georgia, 1982-1985.

External Consulting:

Expert Witness, Johnson v. Wisconsin Elections Commission, 2022.

Expert Witness, Grant v. Raffensperger, challenge Georgia congressional map, 2022

Expert Witness, Brooks et al. v. Abbot, challenge to State Senate District 10, 2022.

Consultant, Lancaster ISD – redrawing of all school board member election districts including demographic analysis and redrawing of election districts, 2021.

Consultant, City of Baytown – redrawing of all city council member election districts including demographic analysis and redrawing of election districts, 2021.

Consultant, Goose Creek ISD – redrawing of all board member election districts including demographic analysis and redrawing of election districts, 2021.

Expert Witness, Christian Ministerial Alliance et al v. Arkansas, racially polarized voting analysis, 2020.

Expert Witness, Bruni et al. v. State of Texas, straight ticket voting analysis, 2020.

Consulting Expert, Sarasota County, VRA challenge to district map, 2020.

Expert Witness, Kumar v. Frisco ISD, TX, racially polarized voting analysis, 2019.

Expert Witness, Vaughan v. Lewisville ISD, TX, racially polarized voting analysis, 2019.

Expert Witness, Johnson v. Ardoyn, (Louisiana), racially polarized voting analysis, 2019.

Expert Witness, Flores et al. v. Town of Islip, NY, racially polarized voting analysis, 2018.

Expert Witness, Tyson v. Richardson ISD, racially polarized voting analysis, 2018.

Expert Witness, Dwight v. State of Georgia, racially polarized voting analysis, 2018.

Expert Witness, NAACP v. East Ramapo Central School District, racially polarized voting analysis, 2018.

Expert Witness, Georgia NAACP v. State of Georgia, racially polarized voting analysis, 2018.

Expert Witness, United States v. City of Eastpoint, racially polarized voting analysis, 2017.

Expert Witness, Georgia NAACP v. Gwinnett County, racially polarized voting analysis, 2017.

Expert Witness for the State of Texas, Lopez, et al v. Abbott, a challenge to the current system of statewide at-large elections for the Texas Supreme Court and the Texas Court of Criminal Appeals, including election analysis, and racially polarized voting analysis, 2017.

Expert witness for the State of Texas, Perez, et al v State of Texas (and consolidated cases), challenge to adopted Texas election districts for the US Congress and the Texas House of Representatives, 2011-2017.